

# SLD-67 Series

## CONTROL SIGNAL SURGE PROTECTION DEVICES

- Units to suit all Process I/O Circuits
- Multi-stage hybrid input circuitry for maintenance free protection
- Ultra-slim design only 6.7mm wide!
- Automatic earth connection
- Suitable for all standard i/o including mA, Volts, Thermocouples and RTD's
- Designed to IEC 61643-1
- Ten year product warranty



### Description

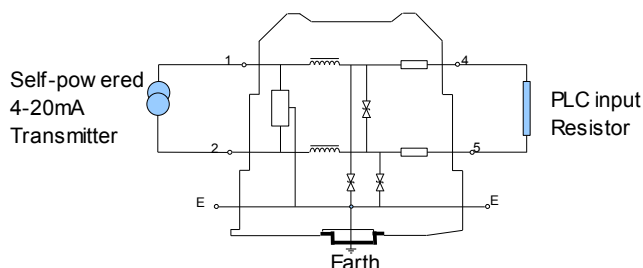
The SLD-67 range of ultra-slim surge protection devices from Industrial Interface are designed to protect process control signals from the effects of high voltage transients and overloads.

The units work by diverting the transient current to earth whilst limiting the voltage on the signal lines to acceptable levels. The necessary earth connection is automatically achieved through the mounting of the units to a suitably earthed DIN rail.

Units are available for all standard process control signal types, including 2 and 3-wire 4-20mA loops, voltage inputs and outputs, mV and thermocouple inputs and 2 and 3-wire RTD inputs. There are also versions for digital inputs and outputs.

Some typical applications are shown below.

Typical 4-20 mA current loop application showing how an SLD-67 device is wired to protect the input circuitry of a PLC from voltage transients.

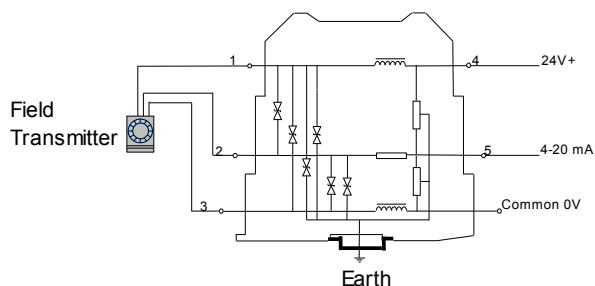


A 32 V device is recommended for 24 Vdc powered current loop circuits. The diagram shows how the automatic connection of the protective earth to the TS35 DIN rail saves on installation wiring and time.

Field transmitter powered through SLD-67 protection device.

4-20 mA signalled returned back through surge protector to process monitoring system.

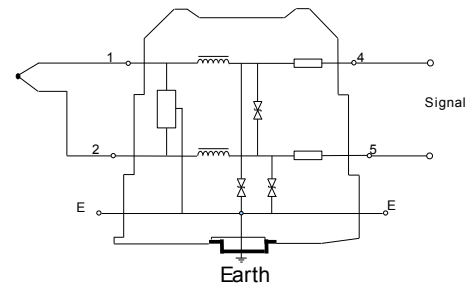
Again a 32V device is recommended although a 55V device is available for higher voltage systems.



This is the set up to protect mV inputs from such sources as thermocouples and photocells etc.

Typically these systems require a lower clamping voltage so an SLD-67 with a 7 V clamping voltage is recommended.

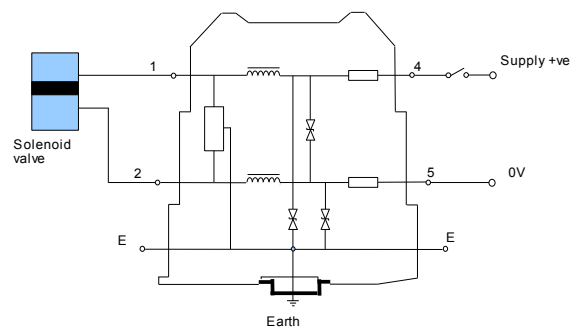
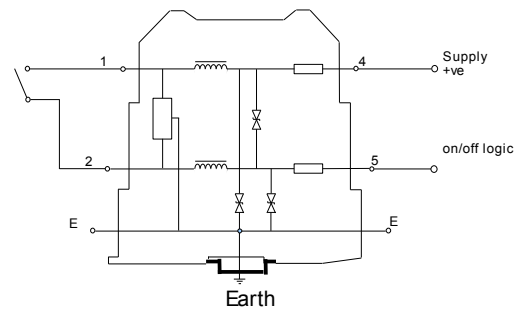
This arrangement is also suitable for turbine flowmeters.



For Digital inputs and outputs the following would be typical wiring diagrams.

The choice of clamping voltage would again be a function of the system operating voltage.

For Digital outputs the clamping voltage should be set the next available level above the system operating voltage.



Parameter	SLD67-32	SLD67-16	SLD67-7	SLD67-RTD	SLD67-32-3W
Rated Operating Voltage (Un) Vdc	32	16	7	7	32
Maximum Cont Operating Voltage (Uc) Vdc	36	17	7.7	5	36
Protection Level (Up) Vdc	<45	<25	<12	<12	<45
Max Discharge Current (Imax 8/20)	10 kA	10 kA	10 kA	10 kA	10 kA
Response Time	< 1nS	< 1nS	< 1nS	< 1nS	< 1nS
Leakage Current (Un) uA	5	5	500	0.3	5
Series Resistance (Ω/line)	2	2	2	2.7	2
Operating Ambient deg C	-40 to +80	-40 to +80	-40 to +80	-40 to +80	-40 to +80
Relative Humidity	5-95%	5-95%	5-95%	5-95%	5-95%
Dimensions					90 x 36 x 66 mm
Designed to EN 61643-21:2000	Yes	Yes	Yes	Yes	Yes
Installation on 35 mm DIN rail	Yes	Yes	Yes	Yes	Yes
High Speed Communications Option	Yes add HS	Yes add HS	Yes add HS	Yes add HS	Yes add HS